REMARKS

Applicants have now had an opportunity to consider the office action issued on May 31, 2005. Reconsideration of the Application is respectfully requested.

The Office Action

Claims 1-3, 12, 13, 22, and 23 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Matsuda (U.S. Patent No. 5,973,792).

Claims 4-7, 11, 14-17, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuda in view of Bilgen ("Restoration of Noisy Images Blurred by a Random Point Spread Function").

Claims 8, 9, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuda in view of Numakura (U.S. Patent No. 5,371,616).

Claims 10 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuda in view of Balanis (*Advanced Engineering Electromagnetics*) and Numakura.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuda in view of Bilgen and Numakura.

The Claims Distinguish Over the References of Record

Claim 2 calls for transforming show-through compensated density data for one or all of the images into show-through compensated reflectance image data. Matsuda fails to teach transforming show-through compensated density data into show-through compensated reflectance image data. The cited portion of Matsuda describes obtaining a transmittance value T from color material density. Matsuda is discovering the density of the image that shows through and subtracting it out based on its transmittance through the facing page. In contrast, the present application proposes relying on the reflectance characteristics of the substrate on which the images are printed to determine what unwanted portions of print will show through. In col. 4, lines 5-11 of Matsuda, Matsuda discusses the density values Db and Dg, which are both densities of the ink on the page (Db being a reference) rather than densities of the pages. By virtue of finding the density of the substrate, the present application proposes finding how that substrate will reflect light based on that

density. Again, Matsuda determines a transmittance rather than a reflectance, and eliminates show through based on image density rather than substrate density.

One distinct advantage of the proposed system over Matsuda is that it is dependent on the characteristics of the substrate, rather than on the characteristics of the print on the substrate. Therefore, once the reflectance characteristics of the substrate have been determined, the same reflectance data can be used for all similar jobs (e.g., copying multiple pages from the same book). Matsuda, in contrast, must recalculate transmittance for every iteration because the print on the substrate is different, even though the substrate may be the same.

It is therefore respectfully submitted that **claim 2** and **claims 3-11** dependent therefrom now distinguish patentably and unobviously over the references of record.

Claim 12 calls for a show through image compensation device that determines show-through compensated density data for a substrate based on scanned density data and approximate absorbency data of the substrate. As previously discussed, Matsuda relies on the ink density of the image printed on the pages, rather than the density of the substrate to eliminate show-through. It is respectfully submitted that Matsuda fails to teach the limitations of **claim 12**, and therefore, **claim 12** as well as **claims 13-22** dependent therefrom distinguish patentably and unobviously over the references of record.

Similarly, **claim 23** calls for show-through compensation that is based on density and absorbency of a substrate described by a linearized relationship. As previously discussed, Matsuda fails to teach basing show-through compensation on density and absorbency measures of a substrate. It is therefore respectfully submitted that **claim 23** distinguishes patentably and unobviously over the references of record.

CONCLUSION

For the reasons detailed above, it is submitted all claims remaining in the application (Claims 2-23) are in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby authorized to call Patrick Roche, at Telephone Number (216) 861-5582.

Respectfully submitted,

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Date

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